

REMARKS

Claims 1-15 are pending in this application. By this Amendment, claims 1 and 8 are amended. Reconsideration of the application is respectfully requested.

The courtesies extended to Applicants' representative by Examiner Dang during the January 19, 2006, personal interview, are gratefully appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the Remarks below and constitute Applicants' record of the interview.

The Office Action rejects claims 1-4, 8-11 and 15 under 35 U.S.C. §102(b) over Toru et al. (JP-A-10-256169); claims 5 and 12 under 35 U.S.C. §103(a) over Toru; and claims 6, 7, 13 and 14 over Toru in view of Takasaki (U.S. Patent No. 5,183,778). The rejections are respectfully traversed.

As agreed during the personal interview, none of the applied references, alone or in combination, disclose or suggest a substrate and a method for fabricating a substrate that includes preparing a silicon substrate and forming a silicon germanium film over the silicon substrate without an enveloping layer, as recited in independent claim 1 and similarly recited in independent claim 8.

In particular, Toru teaches forming a cap layer or enveloping layer over a germanium film and a silicon substrate (paragraphs [0021] and [0022]). The enveloping layer in Toru has a thickness of 10 angstroms or less (paragraph [0021]). Accordingly, because Toru teaches an enveloping layer over a Ge or GeSi film, Toru does not disclose or suggest forming a silicon germanium film over the silicon substrate without the enveloping layer, as recited in independent claims 1 and 8.

Furthermore, although Toru teaches forming a silicon substrate 12 and a stratified germanium film 13 over the silicon substrate 12 (Fig. 1B), Toru also teaches an enveloping layer 11 of silicon or silicon germanium which purpose is to provide a good surface morphology

and a flat film of 10 Angstroms (paragraphs [0021] and [0022]). Accordingly, Toru does not provide a silicon germanium film with a thickness that is greater than 100 nm for the purpose of sustaining epitaxial growth.

Takasaki teaches a semiconductor device that is produced by forming a crystalline substrate of a first layer of silicon and a second layer of gallium arsenide or a gallium arsenide containing compound formed on the first layer (Abstract). Accordingly, Takasaki fails to cure deficiencies in Toru in disclosing or rendering obvious the features of independent claims 1 and 8.

Thus, independent claims 1 and 8, and their dependent claims, are patentable over a combination of the applied references. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. §102(b) and 35 U.S.C. §103(a) is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-15 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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